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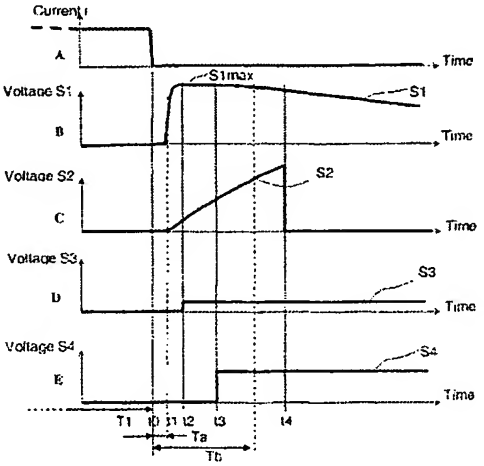
(54) **Title:** A METHOD AND DEVICE FOR MEASURING THE THICKNESS AND THE ELECTRICAL CONDUCTIVITY OF AN OBJECT OF MEASUREMENT



(57) **Abstract:** The present invention relates to a method for non-contact measurement of a dimension and/or an electrical property in an electrically conducting object to be measured by using electromagnetic induction, and in which method an electromagnetic field is brought to penetrate through the object to be measured. The invention is achieved by the following method steps: - placing a transmitter coil on one side of the object to be measured, - placing a receiver coil on the other side of the object to be measured, - generating a magnetic field in the transmitter coil, - generating a sudden change of the magnetic field generated in the transmitter coil from one level to another, - detecting the voltage induced in the receiver coil, - determining the period of time that elapses from the time T2 of the change of the magnetic field in the transmitter coil up to the time Ta when a voltage starts to be induced in the receiver coil, - determining the magnitude of the induced voltage, and calculating the thickness and/or electrical conductivity of the object to be measured.

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